

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

LEROY J. MORTIMER,	:	CONSOLIDATED UNDER
ET AL.,	:	MDL 875
	:	
v.	:	E.D. PA CIVIL ACTION NO.
	:	2:13-04169-ER
A.O. SMITH CORP., ET AL.,	:	
	:	

M E M O R A N D U M

EDUARDO C. ROBRENO, J.

October 23, 2015

Presently before the Court are the Motions of Defendant Ford Motor Co. to Exclude the Expert Testimony of Arthur Frank, M.D., Ph.D. (ECF. No. 293) and Scott A. Bralow, D.O. (ECF. No. 430). As provided below, although each of the experts will be permitted to offer an opinion as to general causation, the Court determines that they will not be permitted to offer an opinion as to specific causation.

I. BACKGROUND

This case was removed in July 2013 from the Court of Common Pleas of Philadelphia to the United States District Court for the Eastern District of Pennsylvania as part of MDL-875. Plaintiff Leroy Mortimer alleges that he ("Plaintiff" or "Mr. Mortimer") was exposed to asbestos while, inter alia, working at the Philadelphia Navy yard, the New York Shipbuilding yard in Camden, New Jersey, and various automotive and electric shops in New Jersey. With respect to moving Defendant Ford Motor Co.

("Ford"), Plaintiff alleges that he was exposed to asbestos from automobile brakes on and around which he performed work at various automotive shops throughout New Jersey during the period 1960 to 1985.

Plaintiff asserts that he developed renal cancer as a result of exposure to Defendants' products, including the brakes used in Defendant Ford's automobiles. In support of this contention, Plaintiff has presented expert opinion testimony of two experts, each of whom asserts that there is a causal link between asbestos exposure and renal cancer: Arthur Frank, M.D., Ph.D. ("Dr. Frank"), and Scott Bralow, D.O. ("Dr. Bralow").

Defendant Ford has moved to exclude the testimony of each of these experts, contending that their opinions are inadmissible for various reasons, including, most notably, that: (1) the theory underlying the opinions (which Defendant asserts is the "any exposure" theory) has been deemed inadmissible under Pennsylvania law, (2) the opinions are generally unreliable, and (3) the experts are unable to establish either (a) general causation, or (b) specific causation, thus rendering their opinions irrelevant and inadmissible. In support of its position, Ford has presented a competing expert report of Dr. Suresh H. Moolgavkar, M.D., Ph.D., who (1) asserts that there is no evidence that asbestos exposure is linked with renal cancer,

and (2) opines that Plaintiff's renal cancer likely developed as a result of the fact that he has four other risk factors for the disease: advanced age, a history of smoking, hypertension, and a high body mass index. (ECF No. 293-7.)

A hearing on Defendant Ford's motions was held on March 10 and 11, 2015. (ECF Nos. 563 and 564.) Each of Plaintiff's two experts testified at the hearing (upon cross-examination by Defendant Ford) regarding the substance of their expert report and deposition testimony. After that hearing, the Court granted Defendant leave to again depose each of the two experts. (ECF No. 560.) The parties thereafter submitted proposed findings of fact and conclusions of law ("FF&CL"). (ECF Nos. 572 to 574.) The matter is now ripe for exploration.

II. LEGAL STANDARD

Defendant asserts that federal law applies to the determination of whether or not the experts' testimony is admissible, but that Pennsylvania law applies to the substantive issues in the case. According to Defendant, a Daubert analysis requires examination of the substance of Pennsylvania law in order to determine whether the proffered expert evidence "fits" the issues in the case.

Plaintiff asserts that the only applicable law is that of New Jersey because the claims against Defendant are governed

by New Jersey law. Plaintiff does not stipulate to Pennsylvania law regarding the claims against Defendant Ford.

A. Substantive Law (New Jersey)

Defendant points out that some of Plaintiff's alleged asbestos exposures in connection with its products occurred in Pennsylvania. (Def. FF&CL, ECF No. 574 at ¶ 100.) However, Plaintiff has made clear that, with respect to Defendant Ford, he is only pursuing claims arising from alleged exposures in New Jersey. As such, all of the alleged asbestos exposures giving rise to Plaintiff's claims against Defendant Ford occurred in New Jersey. Therefore, New Jersey state law is applicable to Plaintiff's claims against Defendant. See Conner v. Alfa Laval, Inc., 799 F. Supp. 2d 455 (E.D. Pa. 2011)(Robreno, J.). As such, Pennsylvania law is not applicable to the Court's analysis in deciding Defendant's motions to exclude Plaintiff's expert testimony. To the extent that other Defendants' claims are governed by Pennsylvania substantive law, those Defendants have agreed to be bound by this ruling regarding the admissibility of the experts' testimony. (See ECF Nos. 457, 520, 545, and 557.)

B. Procedural Law (Federal)

In multidistrict litigation, "on matters of procedure, the transferee court must apply federal law as interpreted by the court of the district where the transferee court sits."

Various Plaintiffs v. Various Defendants ("Oil Field Cases"), 673 F. Supp. 2d 358, 362-63 (E.D. Pa. 2009)(Robreno, J.). Therefore, in addressing the procedural matters herein, the Court will apply federal law as interpreted by the U.S. Court of Appeals for the Third Circuit. Id. The admissibility of evidence in a case pending in federal court is a matter of procedure. See Forrest v. Beloit Corp., 424 F.3d 344, 354 (3d Cir. 2005). As such, in this multidistrict litigation, it is governed by federal law (which is, in this case, the Federal Rules of Evidence) as interpreted by the Third Circuit. Id.; Oil Field Cases, 673 F. Supp. 2d at 362-63.

The Third Circuit has held that there are certain limited circumstances in which a state's substantive law regarding admissibility of expert evidence may apply in a case pending in federal court. In re Paoli R.R. Yard PCB Litigation, 35 F.3d 717, 750-52 (3d Cir. 1994) ("Paoli II"). Of relevance to the case at hand, it has held that such is the case where the state substantive rule of admissibility (1) does not conflict with the federal rule, and (2) implicates the state law substantive burden of proof regarding a matter for which the evidence at issue is presented. Id.

In its motions, Defendant asserted that, as part of Plaintiff's substantive burden of proof in an asbestos case,

Pennsylvania law requires that, in a product liability action, an expert's testimony must reliably establish both general causation and specific causation. Defendant also asserts that part of Pennsylvania's substantive burden of proof regarding medical causation in a product liability action is that the expert must testify that he or she provides the opinion about the cause of the injury or illness at issue with "a reasonable degree of medical certainty" and that it is insufficient for an expert to opine that the defendant's product (or conduct) "may have" caused plaintiff's injury. (Def. FF&CL, ECF No. 574 at ¶ 117.) In support of this assertion, Defendant cites Paoli II, 35 F.3d at 750. In addition, Defendant asserts that each expert's opinion amounts to an "any exposure" opinion on causation that has been deemed inadmissible in all circumstances as a matter of substantive law in Pennsylvania. Because the Court has determined that New Jersey substantive law is applicable (rather than Pennsylvania law), the Court need not address each of these arguments pertaining to Pennsylvania law and declines to do so.

With respect to New Jersey law, Defendant asserts that, pursuant to Paoli II (requiring, in some circumstances, incorporation of a state's substantive law into a Daubert determination regarding admissibility of expert evidence in a case pending in federal court), New Jersey law requires that

Plaintiff's experts must reliably establish both general causation and specific causation in order for their testimony to be admissible pursuant to Daubert in a case applying New Jersey substantive law. (Def. FF&CL, ECF No. 574 at ¶ 110.) In support of this assertion, Defendant relies upon (1) Rutigliano v. Valley Bus. Forms, 929 F. Supp. 779, 783 (D.N.J. 1996), (2) In re "Agent Orange" Prod Liab. Litig., 611 F. Supp. 1223, 1250 (E.D.N.Y. 1985), and, although not specifically referenced by Defendant, (3) DeLuca by DeLuca v. Merrell Dow Pharmaceuticals, Inc., 911 F.2d 941 (3d Cir. 1990), abrogated on other grounds (discussed within Rutigliano). None of these cases is controlling as to New Jersey law, as none was decided by an appellate court in New Jersey. More importantly, though, the Court has reviewed these cases and has determined that none of these cases supports this proposition. (Because the cases are not on point, the Court will not address them at length herein.)

However, to the extent that the Court has been able to locate any authority on the issue from an appellate court in New Jersey, one court has indicated that, although expert evidence is frequently used to establish specific causation, it is not always required. In Kurak v. A.P. Green Refractories Co., 689 A.2d 757 (N.J. Super. Ct. App. Div. 1997), the Appellate Division explained in an asbestos case that "there must be

'competent evidence, usually supplied by expert proof, establish[ing] a nexus between the exposure and plaintiff's condition [i.e., specific causation]...'" 689 A.2d at 761 (internal citation omitted)(emphasis added).

In short, Defendant has not cited - and the Court has not located - any authority establishing that an asbestos plaintiff asserting claims under New Jersey law must present expert evidence in order to establish both general causation and specific causation. In particular, the Court concludes that, under New Jersey law, there is no absolute requirement for expert evidence to establish specific causation. The Court notes, however, that it agrees with Defendant's contention that a Plaintiff asserting a causal link between asbestos exposure and renal cancer (a somewhat infrequently seen and/or atypical asbestos-related illness) must provide expert testimony regarding this question of general causation - a question outside of the realm of a lay juror's knowledge. See Dondero v. Lenox China, 1990 WL 86061, at *2 (D.N.J. 1990) (stating that, under New Jersey law, "[e]xpert testimony is required to support a claim for an injury which is either subjective in nature or of the sort that its cause and degree of severity cannot be determined by laymen").

Having determined that, as part of Plaintiff's substantive burden of proof in an asbestos action brought under New Jersey law and arising in the context of renal cancer, expert evidence must be presented to establish general causation (though not necessarily specific causation), the Court next sets forth the applicable standard, pursuant to Federal Rule of Evidence 702 and Daubert, in determining the admissibility of Plaintiff's expert evidence in this case.

C. Federal Rule of Evidence 702 and Daubert

Federal Rule of Evidence 702 provides that a witness qualified as an expert may testify in the form of an opinion if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. The Court is to interpret the rule liberally in favor of admission because "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 596, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993).

Before proposed expert testimony is presented to a jury, the Court must determine whether the evidence is relevant and reliable under the following test: "(1) the proffered witness must be an expert, i.e., must be qualified; (2) the expert must testify about matters requiring scientific, technical or specialized knowledge, i.e., reliability; and (3) the expert's testimony must assist the trier of fact, i.e., fit." United States v. Schiff, 602 F.3d 152, 172 (3d Cir. 2010) (internal editorial marks removed). Each of these factors is discussed further below:

1. Qualification

To qualify as an expert, "Rule 702 requires the witness to have 'specialized knowledge' regarding the area of testimony." Betterbox Comm. Ltd. v. BB Techs., Inc., 300 F.3d 325, 335 (3d Cir. 2002)(quoting Waldorf v. Shuta, 142 F.3d 601, 625 (3d Cir. 1998)). The Third Circuit has instructed courts to interpret the qualification requirement "liberally" and not to insist on a certain kind of degree or background when evaluating the qualifications of an expert. See Waldorf, 142 F.3d at 625. "The language of Rule 702 and the accompanying advisory committee notes make clear that various kinds of 'knowledge, skill, experience, training, or education,' qualify an expert as

such." In re Paoli R.R. Yard PCB Litig., 916 F.2d 829, 855 (3d Cir. 1990) (quoting Fed. R. Evid. 702)("Paoli I").

Moreover, "[t]his liberal policy of admissibility extends to the substantive as well as the formal qualifications of experts." Pineda v. Ford Motor Co., 520 F.3d 237, 244 (3d Cir. 2008). Thus, "it is an abuse of discretion to exclude testimony simply because the trial court does not deem the proposed expert to be the best qualified or because the proposed expert does not have the specialization that the court considers most appropriate." Id. (quoting Holbrook v. Lykes Bros. S.S. Co., 80 F.3d 777, 782 (3d Cir. 1996)).

2. Reliability

The reliability requirement of Daubert "means that the expert's opinion must be based on the 'methods and procedures of science' rather than on 'subjective belief or unsupported speculation'; the expert must have 'good grounds' for his or her belief." Paoli II, 35 F.3d at 742 (quoting Daubert, 509 U.S. at 590). In Kumho Tire, the Supreme Court held that the Daubert test of reliability is "flexible" and that "the law grants a district court the same broad latitude when it decides how to determine reliability as it enjoys in respect to its ultimate reliability determination." 526 U.S. at 141-42 (emphasis

omitted). In determining whether the reliability requirement is met, courts examine the following factors where appropriate:

(1) whether a method consists of a testable hypothesis; (2) whether the method has been subject to peer review; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the technique's operation; (5) whether the method is generally accepted; (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness testifying based on the methodology; and (8) the non-judicial uses to which the method has been put.

United States v. Mitchell, 365 F.3d 215, 235 (3d Cir. 2004) (citing Paoli II, 35 F.3d at 742 n.8). These factors are neither exhaustive nor applicable in every case. Kannankeril v. Terminix Int'l, Inc., 128 F.3d 802, 806-07 (3d Cir. 1997).

Under the Daubert reliability prong, parties "do not have to demonstrate to the judge by a preponderance of the evidence that the assessments of their experts are correct, they only have to demonstrate by a preponderance of evidence that their opinions are reliable." Paoli II, 35 F.3d at 744 (emphasis omitted). "The evidentiary requirement of reliability is lower than the merits standard of correctness." Id. "As long as an expert's scientific testimony rests upon 'good grounds, based on what is known,' it should be tested by the adversary process—competing expert testimony and active cross-examination—rather than excluded from jurors' scrutiny for fear that they will not

grasp its complexities or satisfactorily weigh its inadequacies." Mitchell, 365 F.3d at 244 (quoting Ruiz-Troche v. Pepsi Cola of P.R. Bottling Co., 161 F.3d 77, 85 (1st Cir. 1998)).

3. Fit

For expert testimony to meet the Daubert "fit" requirement, it must "assist the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702. "This condition goes primarily to relevance. Expert testimony which does not relate to any issue in the case is not relevant and, ergo, non-helpful." Daubert, 509 U.S. at 591 (citations and internal quotation marks omitted). "'Fit' is not always obvious, and scientific validity for one purpose is not necessarily scientific validity for other, unrelated purposes." Id.

III. DISCUSSION

A. Motion to Exclude Arthur Frank, M.D., Ph.D.

1. Defendant's Arguments

Based upon the report of Dr. Arthur Frank (ECF No. 293-4), which is accompanied by two affidavits: a June 2012 affidavit (ECF No. 293-5), and a supplemental December 2013 affidavit (ECF No. 293-6), Defendant has moved to exclude Dr. Frank's testimony and to preclude him from serving as an expert in this case. Defendant contends that Dr. Frank: (1) does not

reliably establish general causation because he (a) does not, and cannot, show that there is any causal link between asbestos exposure and renal cell carcinoma, (b) cannot show that Plaintiff's exposure to chrysotile caused his renal cell carcinoma, and (c) did not consider, nor rule out, known competing causes of renal cell carcinoma; and (2) does not reliably establish specific causation because (a) his opinion is an "any exposure," opinion that is inadmissible under Daubert, (b) federal courts have repeatedly excluded the "any exposure" theory on Daubert grounds, as unreliable, and (c) his opinion is irrelevant and does not "fit" (as required by Daubert) because Pennsylvania courts reject the "any exposure" opinion as proof of causation.

In its reply brief, Ford argues that Dr. Frank should be excluded because, during his first deposition in this case (which occurred after Ford filed its motion to preclude), Dr. Frank, (3) according to Ford's recitation of events, confirmed that his "cumulative exposure" theory is in fact the same as the "every breath" theory, (4) did not cite in his report or affidavits to any literature regarding renal cell carcinoma (and did not review or rely upon any such literature prior to formulating his opinion in this matter), and (5) did not rely upon the report of Dr. Bralow as a basis for his opinion.

Moreover, Ford contends that the opinion of Dr. Frank is inadmissible because (6) during deposition, Dr. Frank (a) "cherry-picked" literature that was old and did not control for smoking (which Defendant contends is the major cause of renal cancer), (b) rejected newer, more robust studies merely because they were contrary to his opinion, and (c) cited studies which, upon closer review, are actually contrary to his opinion and fail to show any correlation between asbestos exposure and renal cancer.

With its Findings of Fact and Conclusions of Law, Defendant asserts that Dr. Frank's opinion is unreliable because he (7) has never studied the effects of heated chrysotile, as is found in brakes, and (8) was unable to identify how much asbestos exposure above background levels causes kidney cancer. (Def. Mem. at 5, ECF No. 574-1.)

In response to the expert report and affidavits of Dr. Frank, Defendant Ford has presented a competing expert report from Dr. Suresh H. Moolgavkar, M.D., Ph.D., who (1) asserts that there is no evidence that asbestos exposure is linked with renal cancer, and (2) opines that Plaintiff's renal cancer likely developed as a result of the fact that he has four other risk

factors for the disease: advanced age, a history of smoking, hypertension, and a high body mass index (Doc. No. 293-7.)

2. Plaintiff's Arguments

Plaintiff responds that: (1) the expert report of Dr. Frank states that there are medical studies to support his position, and (2) Dr. Frank's deposition (which had not yet occurred at the deadline for the filing of Plaintiff's opposition) would (a) show that he relied in part upon the report of another of Plaintiff's experts (Dr. Bralow), who discussed the epidemiology of asbestos and renal cancer, as well as literature on the subject, and (b) produce and discuss articles and literature supporting his opinion, and (3) Plaintiff is not relying solely on Dr. Frank to establish his case and is instead also relying on the testimony of Dr. Bralow.

Finally, Plaintiff argues that, (4) even if Pennsylvania law were relevant, Dr. Frank's testimony complies with Betz and Howard and is admissible. Specifically, Plaintiff notes that (a) Dr. Frank is not providing an opinion based on the "any exposure" theory, (b) no such testimony is necessary in light of the evidence of over 30 years' worth of exposure to asbestos from Ford's products (which is far more than "any exposure" or "a single breath"), and (c) Dr. Frank will testify

at trial about the implications of exposure to Defendant Ford's product in the context of all of Plaintiff's other exposures.

In short, Plaintiff takes the position that Dr. Frank (along with Dr. Bralow) provides admissible testimony that creates a fact issue for the jury (i.e., a "battle of the experts") as to whether asbestos was a cause of his renal cancer.

B. Motion to Exclude Scott Bralow, D.O.

1. Defendant's Arguments

Defendant has also moved to exclude Dr. Bralow's testimony and to preclude him from serving as an expert in this case. In its motion regarding Dr. Bralow (which was filed four months after its motion to preclude Dr. Frank), Defendant Ford contends that Dr. Bralow should be excluded because (1) he can only establish an increase in risk of developing cancer and cannot establish actual causation, (2) his testimony will not assist the jury because he did not discuss exposure to each individual defendant's product(s), (3) he did not exclude other possible causes of Plaintiff's renal cancer, (4) he is not qualified as an expert (because of lack of relevant experience), (5) he has provided an opinion that is unreliable (because it cites only two academic articles, neither of which supports his opinion), and (6) he admits that Defendants have multiple

articles to support their position that there is no causal link between asbestos and renal cancer.

Defendant also asserts that Dr. Bralow's testimony must be excluded because he (7) provided testimony at deposition that amounts to a "cumulative exposure" theory, which Defendant contends (a) is the same as the "any exposure" theory and (b) has been deemed inadmissible in many courts, including Pennsylvania courts in Betz and Howard (in part because, according to Defendant, these cases make clear that an expert must assess the dose of alleged asbestos exposure with respect to each individual defendant's product).

For the first time in its reply brief, Ford asserts that Dr. Bralow's opinion (8) entirely lacks an underlying scientific methodology and is therefore inadmissible under Daubert.

In short, Defendant asserts that Dr. Bralow should be excluded pursuant to Daubert because (in part due to Betz, rendering the whole opinion inadmissible), Dr. Bralow will not be able to establish general or specific causation (especially given that Defendant's products (brakes) contained asbestos of the chrysotile type, which Defendant asserts is fairly benign).

In response to the expert report of Dr. Bralow, Defendant Ford has again presented the competing expert report of Dr. Suresh H. Moolgavkar, M.D., Ph.D. (Doc. No. 430-7.)

2. Plaintiff's Arguments

In response to Defendant's motion to exclude Dr. Bralow, Plaintiff responds by asserting: (1) the fact that Dr. Bralow acknowledges a dispute in the medical literature about the existence of a causal link between asbestos and renal cancer does not render his testimony unsupported or inadmissible, as Dr. Bralow relies upon studies that support his opinion, (2) the fact that Dr. Bralow does not address Plaintiff's exposure to each individual Defendant's product does not render his opinion flawed or inadmissible because he is not being offered to establish specific causation (and Dr. Frank does that), and (3) the fact that Dr. Bralow acknowledges that both asbestos and other factors (such as smoking) may have contributed to Plaintiff's renal cancer does not render his opinion inadmissible or insufficient.

In short, Plaintiff takes the position that Dr. Bralow (along with Dr. Frank) provides admissible testimony that creates a fact issue for the jury (i.e., a "battle of the experts") as to whether asbestos was a cause of his renal cancer.

C. Analysis

The record in this case contains evidence that Plaintiff was regularly exposed to respirable asbestos dust from brakes used on Ford automobiles during a twenty-five year period spanning from 1960 to 1985 - and that such exposure occurred at least a few hundred times and perhaps as many as several thousand times. According to Plaintiff's calculations, based on data provided by Defendant Ford, the number of asbestos fibers to which Plaintiff would have been exposed from Ford brakes would be at least in the millions and possibly in the billions. (Pl. FF&CL at ¶ 53, ECF No. 572.) The evidence indicates that much of this exposure was from brakes supplied by Ford.

Defendant does not dispute that there is evidence of frequent, regular, and proximate exposure to asbestos from brakes for which it is liable. Instead, defendant attacks the ability of Plaintiff's experts to establish both general causation and specific causation - arguing that, in order for the testimony to be admissible, it must reliably establish both. (To be clear, "general causation" pertains to whether asbestos can cause the illness at issue (in this case, renal cancer); "specific causation" pertains to whether asbestos from the defendant's product (as opposed to - or in addition to - some

other source of asbestos) was a cause of the plaintiff's asbestos-related illness.)

As explained already, there is no requirement under New Jersey law that an expert establish both general causation, and specific causation in order for his or her opinion to be admissible. To the contrary, New Jersey jurisprudence on the issue clarifies that Plaintiff's evidence (in the form of testimony from fact witnesses or from himself) of extensive asbestos exposure from Defendant's brakes (with frequency, regularity, and proximity) is sufficient to establish specific causation under New Jersey law. See Kurak, 689 A.2d at 761-62 (citing Sholtis v. American Cyanamid Co., 568 A.2d 1196, 1196 (N.J. Super. Ct. App. Div. 1989)). As such, under these circumstances, Plaintiff is only required to proffer expert testimony regarding general causation. However, Plaintiff can, but is not required to, offer expert testimony regarding specific causation, so long as the testimony would be helpful to the jury and is not otherwise inadmissible on other grounds.

While Plaintiff appears to proffer Dr. Bralow exclusively for the purpose of establishing general causation, he proffers Dr. Frank for purposes of establishing general causation, as well as opining as to specific causation. (See ECF No. 293-4.) The Court will therefore determine the admissibility

of the experts' testimony (pursuant to the Daubert standard) as to each purpose for which it is proffered. It first considers Defendant's arguments as to the admissibility of Dr. Frank's testimony regarding specific causation.

1. Specific Causation (Dr. Frank)

Defendant contends that the expert opinion of Dr. Frank is inadmissible pursuant to Daubert for purposes of establishing specific causation because of its nature as an "any exposure" opinion. (Def. Mot. at 14, ECF No. 293-1; Def. FF&CL at 12-13, 25-26, and 38-40, ECF No. 574; Def. Memo. at 1, 5, and 7, ECF No. 574-1.) In support of this contention, it cites to numerous decisions of (a) Pennsylvania state courts, which it contends have created a rule that the "any exposure" opinion is always inadmissible for purposes of establishing causation (such that an opinion of this nature also does not "fit" pursuant to Daubert in a case governed by Pennsylvania law), and (b) other state and federal courts, which it contends have excluded "any exposure" opinions as being unreliable. Defendant contends that this body of caselaw creates a bright-line rule, even under New Jersey Law, that excludes Dr. Frank's testimony. These cases are: Gregg v. VJ Auto Parts, Co., 596 Pa. 274, 943 A.2d 216 (Pa. 2007); Betz v. Pneumo Abex LLC, 615 Pa. 504, 44 A.3d 27 (Pa. 2012); Howard ex rel. Estate of Ravert v. A.W. Chesterton Co.,

621 Pa. 343, 78 A.3d 605 (Pa. 2013); Nelson v. Airco Welders Supply, 107 A.3d 146, 2014 WL 7274237 (Pa. Super. Dec. 23, 2014); In re Toxic Substances Cases, 2006 WL 2404008, at *6 (C.P. Allegheny Aug. 17, 2006), rev'd sub nom; Moeller v. Garlock Sealings Techs., 660 F.3d 950, 954-55 (6th Cir. 2011); Estate of Barabin, 740 F.3d 457 (9th Cir. 2014); Bartel v. John Crane, Inc., 316 F. Supp. 2d 603, 611 (N.D. Ohio 2004); Smith v. Ford Motor Co., 2013 U.S. Dist. LEXIS 7861, at *4, 2013 WL 214378, at *3-4 (D. Utah Jan. 18, 2013); Anderson v. Ford Motor Co., 950 F. Supp. 2d 1217, 1219-20 (D. Utah 2013); Wannall v. Honeywell International, 292 F.R.D. 26, 41 (D.D.C. 2013); Georgia-Pacific Corp. v. Stephens, 239 S.W.3d 304, 315 (Tex. App. 2004); and Butler v. Union Carbide Corp., 712 S.E.2d 537, 540 (Ga. Ct. App. 2011).

The Court need not address individually the cases governed by Pennsylvania law (as it has determined that Pennsylvania law is not applicable to the claims at hand - and Pennsylvania courts have identified the standard used to determine the admissibility of an "any exposure" opinion as being that pursuant to Frye rather than Daubert). With respect to the federal caselaw (and other states' caselaw) cited by Defendant, the Court notes only that it has reviewed each case cited and has determined that each of the cases Defendant relies

upon is inapplicable to and/or distinguishable from the case at hand: nothing in any of the decisions addresses the admissibility, pursuant to Daubert, of an expert's "cumulative exposure" opinion in a case involving a disease not shown to be dose-responsive (or in a case with a record in which there is evidence of extensive asbestos exposure from the defendant's product).

After carefully reviewing the opinion of Dr. Frank (and that of Dr. Bralow), the Court notes that, as stated by Plaintiff, the opinions are "cumulative exposure" opinions, which are - in substance and, by definition - different from the "any exposure" opinion often proffered by experts in asbestos litigation and rejected by the Pennsylvania Supreme Court(See ECF Nos. 293-5 at ¶¶ 62-73, 293-6 at ¶¶ 175-187 (Dr. Frank); ECF No. 430-1 (Dr. Bralow)). For this reason, the Court declines to accept Defendant's argument that the experts' opinions are inadmissible on grounds that they are the same as the "any exposure" opinion. (By way of brief explanation, although the terminology is not always used consistently, the "any exposure" opinion, "every exposure" opinion, and "each and every breath" opinion assert the same (or, in large part, the same) theory of causation. In short, these types of opinions generally assert that exposure to any amount of asbestos above "background"

levels increases the risk of - and/or is a substantial contributing factor to - the development of asbestos-related illnesses. In contrast, Dr. Frank opines that (1) while a single fiber of asbestos cannot cause an asbestos-related illness (and a single exposure of more than one fiber is not necessarily enough to cause it), the more exposures to asbestos one experiences (and the more fibers to which one is exposed), the greater the likelihood that an asbestos-related illness will develop - and (2) the illness at issue was caused by the accumulation of exposures. See ECF Nos. 293-4; 293-5 at ¶¶ 62-73; 293-6 at ¶¶ 175-187; and 369-1 at pp. 147-149, 188-190. In this case, Dr. Frank does not opine that Plaintiff's renal cancer was caused by a single fiber of (or single exposure to) asbestos from Defendant's product.)

Neither the Supreme Court of New Jersey nor the Third Circuit, applying New Jersey law, has considered the admissibility of a "cumulative exposure" opinion for the purpose of establishing specific causation. Nevertheless, because Dr. Frank has set forth in his report (and accompanying exhibits) data demonstrating that asbestos-related illnesses are, generally, dose-responsive (such that the risk of developing an asbestos-related illness increases with increased dose of

asbestos exposure) - a matter beyond the knowledge of a lay juror, he may testify as to this scientific fact.

However, opinions concerning increased risk from increased exposure and dose responsiveness are properly addressed in the context of general causation and not specific causation. This type of opinion does not aid the jury in establishing the frequency, regularity, and proximity of exposure in a particular case, which is necessary for a valid specific causation opinion. Indeed, because Dr. Frank cannot state whether the amount of asbestos exposure in this case would have been sufficient to cause the plaintiff's injuries, his opinion is not helpful (i.e. it does not "fit") in the context of specific causation. As stated, while the jury could rely on opinion evidence when determining specific causation, Dr. Frank's opinion in this case is not appropriate for that purpose.

In short, the Court has determined that Dr. Frank will not be permitted to opine on the increased risk of asbestos-related illness with increased exposure in the context of specific causation, but as described in more detail below, may do so regarding general causation.

2. General Causation (Dr. Frank)

Defendant contends that the Court must preclude Dr. Frank from testifying as an expert in this case as to general

causation because his opinion does not reliably establish that there is a causal link between asbestos exposure and renal cancer. Defendant asserts that the unreliability of his testimony is evidence by the facts that he cannot show that exposure to chrysotile asbestos (as opposed to other types of asbestos) can cause renal cancer, and did not consider, nor rule out, known competing causes of renal cell carcinoma. In addressing Defendant's arguments, the Court applies the standard of Rule 702 as set forth in detail in Daubert:

a. Qualification

Although Defendant has not directly challenged Dr. Frank's qualifications as an expert in this case, for the sake of thoroughness (and with an acknowledgment that his qualifications are somewhat implicitly challenged by Defendant's arguments), the Court first makes clear that it has reviewed Dr. Frank's credentials and work experience and finds him to be qualified to opine on causation in this case. Dr. Frank is a medical doctor who is board certified in, inter alia, occupational medicine, and who earned a Ph.D. based in part on work researching the effect of asbestos on hamster tissues. He is currently a professor in the Department of Environmental and Occupational Health at Drexel University, and is also a professor of medicine at Drexel University. He has published

dozens of articles on asbestos and is currently involved in ongoing research regarding the effects of asbestos on railroad brake workers. Of particular relevance to the motion at hand, Dr. Frank has had published a book chapter discussing asbestos as a cause of renal cancer, has worked on a research project (funded by Defendant Ford) examining the quantity of asbestos fibers released during brake repair work, and has reviewed the academic literature regarding the causes and development of renal cancer - including, the link between asbestos exposure and renal cancer. Therefore, Dr. Frank will not be excluded on grounds that he lacks the qualifications to serve as an expert regarding general causation in this case.

b. Reliability

Dr. Frank opines that asbestos exposure was a cause of Plaintiff's renal cancer. Defendant argues, in short, that Dr. Frank's opinion is not reliable because it cannot establish, based on scientific data, that Plaintiff's renal cancer was caused by asbestos exposure from Defendant's product - and that it did not develop as a result of some other cause (which Defendant's expert asserts may have been advanced age, smoking, obesity, and/or hypertension).

As discussed above, the Court has determined that Dr. Frank's testimony regarding increased risk of renal cancer from

increased exposure to asbestos does not aid in the specific causation analysis. The Court now considers separately the reliability of his opinion as to general causation - and the merits of Defendant's arguments pertaining thereto.

As a legal matter, it is well-established that, a plaintiff need not demonstrate that there was only one cause of a disease, as there may be more than one legal cause of an illness. See, e.g., Kurak, 689 A.2d at 761-62 (confirming that, under New Jersey law (applying the "substantial factor" test, more than one defendant's product can simultaneously be a cause of an asbestos illness); Johnson v. Exxon Mobile Chemical Co., 2012 WL 3064003, at *6-9 (N.J. Super. 2012)(upholding a judge-of-[workers']-compensation's decision concluding that a plaintiff's renal cancer was caused by both asbestos and other toxic substances, based in part on the court's conclusion that the underlying scientific evidence, including academic studies and an expert's opinion, provided sufficient credible evidence).

As a matter of science, Dr. Frank provides opinion testimony that renal cancer may have more than one simultaneous cause (i.e., multiple contributing causes). (Mar. 10, 2015 Hearing Tr. at 34-37, 42-46, 50, ECF No. 563.) He opines that, while smoking may have been a contributing cause of Plaintiff's renal cancer, asbestos exposure was also a cause. (Id.) His

opinion on this point is bolstered by the testimony of Plaintiff's other expert (Dr. Bralow), who also opines that renal cancer may have more than one simultaneous cause. (Mar. 11, 2015 Hearing Tr. at 57, 98-102, ECF No. 564.)

In support of his opinion, Dr. Frank relies upon numerous studies, including: (1) the 2002 academic article by authors including Dr. Stefano Mattioli, M.D., entitled "Occupational Risk Factors for Renal Cell Cancer: A Case-Control Study in Northern Italy," published in the Journal of Occupational and Environmental Medicine (identified hereafter as the "Mattioli Article") (ECF No. 426-7), and (2) a 1995 academic article by authors including Jack Mandel, entitled "International Renal-Cell Cancer Study. IV. Occupation," published in the International Journal of Cancer (the "Mandel Article") (ECF No. 450-5). The Mattioli Article studied 487 individuals (283 of whom had renal cancer, and 238 of whom did not) and controlled for smoking, age, and obesity (or body mass index ("BMI")) as risk factors in the development of renal cancer. It concluded that there was a statistically significant increase in the incidence of renal cancer in male railway workers exposed to asbestos. The Mandel Article examined data on 4,041 individuals (1,732 of whom had renal cancer, and 2,309 of whom did not) at six different study centers in five countries,

and controlled for smoking (up through 1985), age, and obesity/BMI. It concluded that there was a statistically significant increase in the incidence of renal cancer in male workers exposed to asbestos.

The Mattioli and Mandel articles controlled for three of the four factors that Defendant's expert asserts were a possible cause of Plaintiff's illness (smoking, age, and obesity/BMI). Dr. Frank factored in Plaintiff's hypertension (the fourth risk factor identified by Defendant's expert) in providing his opinion, noting that he did not believe it was the sole cause of Plaintiff's renal cancer because, prior to its treatment, it was a recent development in the Plaintiff's medical history - and, after its treatment, it would no longer have been a risk factor. (Mar. 10, 2015 Hearing Tr. at 47-53, ECF No. 563.)

Dr. Frank has factored in and accounted for all four possible alternative causes that Defendant's expert asserts may have caused Plaintiff's renal cancer. In doing so, he has relied on at least two different academic studies published in peer-reviewed journals - each of which provides data that supports his opinion that renal cancer can be caused by (and that Plaintiff's renal cancer was caused, at least in part, by) exposure to asbestos. The Court concludes that these are "good

grounds, based on what is known," and that Dr. Frank's opinion is sufficiently reliable to be presented to the jury. Mitchell, 365 F.3d at 244.

The Court notes that, in addition, in further bolstering his opinion, Dr. Frank also relied on a number of other academic articles establishing a correlation between asbestos exposure and development of renal cancer – although these studies did not control for smoking. These included, inter alia: Margaret McCredie et al., "Risk Factors for Kidney Cancer in New South Wales. IV. Occupation," British Journal of Industrial Medicine, Vol. 50 (pp. 349-354) (1993); and Allan H. Smith et al., "Asbestos and Kidney Cancer: The Evidence Supports a Causal Association," American Journal of Industrial Medicine, Vol. 16 (pp. 159-166) (1989) (the "Smith Article").

To the extent that Defendant has an expert who bases his opinion on reliable studies supporting a different opinion, the matter is one that "should be tested by the adversary process – competing expert testimony and active cross-examination – rather than excluded from jurors' scrutiny." Mitchell, 365 F.3d at 244. Similarly, although there is no requirement that an expert distinguish between the types of asbestos to which there was exposure in order to establish causation with respect to the asbestos in a particular

defendant's product, to the extent that Defendant or its expert has properly presented evidence that chrysotile asbestos is incapable of causing renal cancer, such evidence is of the type that may be considered by the jury. See id. Accordingly, Dr. Frank will not be precluded from testifying as an expert on general causation in this case on grounds that his opinion is unreliable.

c. Fit

The Court concludes that Dr. Frank's testimony is relevant to the important issue of general causation in this case and believes that it will assist the jury in understanding the evidence linking asbestos exposure with the development of renal cancer (and ruling out other possible causes of the illness). See Fed. R. Evid. 702; Daubert, 509 U.S. at 591. As such, it will not be excluded on grounds that it does not "fit" the issues in the case.

In sum, the Court concludes that the opinion of Dr. Frank as to general causation satisfies the requirements of Rule 702 and Daubert. Defendant's motion to exclude his testimony is therefore denied with respect to this issue.

3. General Causation (Dr. Bralow)

Defendant contends that the Court must preclude Dr. Bralow from testifying as an expert in this case as to general

causation because his opinion does not reliably establish that there is a causal link between asbestos exposure and renal cancer. Defendant asserts that the unreliability of his testimony is evidenced by the facts that he (i) is not qualified as an expert (because of lack of relevant experience), (ii) can only establish an increase in risk of developing cancer (and cannot establish actual causation), (iii) did not consider, nor rule out, known competing causes of renal cell carcinoma, and (iv) bases his opinion on only two academic articles (which Defendant contends do not support his opinion and are contradicted by multiple other articles). In addressing Defendant's arguments, the Court applies the standard of Rule 702 as set forth in detail in Daubert:

a. Qualification

Defendant asserts that Dr. Bralow is not qualified to serve as an expert in this case. The Court has reviewed Dr. Bralow's credentials and work experience and finds him to be qualified to opine on causation in this case. Dr. Bralow is an osteopathic physician who is board-certified in, inter alia, nephrology. He has operated renal and dialysis centers. Of particular relevance to the motion at hand, Dr. Bralow has had published three academic articles on diseases of the kidney, and has reviewed the academic literature regarding the causes and

development of renal cancer - including, the link between asbestos exposure and renal cancer. Therefore, Dr. Bralow will not be excluded on grounds that he lacks the qualifications to serve as an expert regarding general causation in this case.

b. Reliability

Dr. Bralow opines that asbestos exposure increased Plaintiff's risk of developing renal cancer. Defendant argues, in short, that Dr. Bralow's opinion is not reliable because it cannot establish, based on scientific data, that Plaintiff's renal cancer was caused by asbestos exposure - and that it did not develop as a result of some other cause (which Defendant's expert asserts may have been advanced age, smoking, obesity, and/or hypertension).

In support of his opinion, Dr. Bralow relies upon several studies, including the Mattioli Article and the Mandel Article. (See ECF No. 430-1 and 560.) At hearing, upon questioning by defense counsel, Dr. Bralow also discussed several other articles, including the Smith Article (also discussed by Dr. Frank), which reviewed three academic studies suggesting a causal link between asbestos exposure and renal cancer in humans. (Mar. 11, 2015 Hearing Tr. at 57, 102-09, ECF No. 564). Dr. Bralow provides opinion testimony that renal cancer may have more than one simultaneous cause (i.e., multiple

contributing causes). (Mar. 11, 2015 Hearing Tr. at 57, 98-102, ECF No. 564; see also ECF No. 430-1.) He opines that, while smoking may have been a cause of Plaintiff's renal cancer, asbestos exposure was also a cause. (Id.) His opinion on this point is bolstered by the testimony of Plaintiff's other expert (Dr. Frank), who also opines that renal cancer may have more than one simultaneous cause. (Mar. 10, 2015 Hearing Tr. at 34-37, 42-46, 50, ECF No. 563.)

The Mattioli and Mandel articles controlled for three of the four factors that Defendant's expert asserts were a possible cause of Plaintiff's illness (smoking, age, and obesity/BMI). Dr. Bralow factored in Plaintiff's hypertension (the fourth risk factor identified by Defendant's expert) in providing his opinion, explaining that he did not believe it was the sole cause of Plaintiff's renal cancer because if hypertension alone was such a strong predictor of renal cancer, there would a much higher rate of renal cancer in the United States. ((Mar. 11, 2015 Hearing Tr. at 98-99, ECF No. 564.)

Dr. Bralow has factored in and accounted for all four possible alternative causes that Defendant's expert asserts may have caused Plaintiff's renal cancer. Like Dr. Frank, in doing so, he has relied on at least two different academic studies published in peer-reviewed journals - each of which provides

data that supports his opinion that renal cancer can be caused by (and that Plaintiff's renal cancer was caused, at least in part, by) exposure to asbestos. The Court concludes that these are "good grounds, based on what is known," and that Dr. Bralow's opinion is sufficiently reliable to be presented to the jury. Mitchell, 365 F.3d at 244.

Nothing in the law requires an expert to establish that a given asbestos exposure "actually" caused the plaintiff's illness in order for his (or her) opinion to be deemed reliable. Rather, the determination as to what Defendant refers to as "actual" causation is a fact question for the jury - subject to the civil standard that such causation was "more likely than not." See Grassis v. Johns-Manville Corp., 248 N.J. Super. 446, 457, 591 A.2d 671, 677 (N.J. Super. Ct. App. Div. 1991) (discussing application under New Jersey law of the 51% test in asbestos cases involving multiple potential causes of a plaintiff's illness). In essence, Defendant's argument pertains to specific causation (rather than general causation) - and asserts that an expert must be able to establish specific causation in order for his (or her) opinion to be admissible. However, Plaintiffs seek to introduce Dr. Bralow solely for purposes of establishing general causation - and the Court has determined that the issue of specific causation is one for the

jury. Therefore, the Court will not exclude his testimony on grounds that he is unable to establish "actual causation" (i.e., specific causation).

To the extent that Defendant challenges Dr. Bralow's opinion as unreliable, the Court again concludes (as explained above with respect to Dr. Frank), that it is reliable as to general causation because the academic articles relied on by Dr. Bralow support his opinion that asbestos can cause renal cancer (and that exposure to asbestos results in an "increased risk" of developing renal cancer).

To the extent that Defendant has proffered an expert who bases his opinion on reliable studies supporting an opinion different from that of Dr. Bralow, the matter is one that "should be tested by the adversary process – competing expert testimony and active cross-examination – rather than excluded from jurors' scrutiny." Id. Accordingly, Dr. Bralow will not be precluded from testifying as an expert on general causation in this case on grounds that his opinion is unreliable.

c. Fit

The Court concludes that Dr. Bralow's testimony is relevant to the important issue of general causation in this case and believes that it will assist the jury in understanding the evidence linking asbestos exposure with the development of

renal cancer (and ruling out other possible causes of the illness). See Fed. R. Evid. 702; Daubert, 509 U.S. at 591. As such, it will not be excluded on grounds that it does not “fit” the issues in the case.

In sum, the Court concludes that the opinion of Dr. Bralow as to general causation satisfies the requirements of Rule 702 and Daubert. Defendant’s motion to exclude his testimony is therefore denied with respect to this issue.

IV. CONCLUSION

Dr. Frank will not be permitted to testify as to specific causation in this case because his opinion will not aid the jury in making their specific causation analysis. With respect to general causation, the opinions of Dr. Frank and Dr. Bralow satisfy the requirements of Federal Rule of Evidence 702 and Daubert and will therefore not be excluded.

An appropriate order follows.